

REMARKS

The claims are claims 1 to 15.

The application has been amended at several locations to correct minor errors. The amendments include the reference to the provisional priority application and an update of the status of the cited co-pending application.

New claim 14 and 15 are added. These claims recite the transfer request bus including nodes 117, transfer requestor nodes 116, data transfer bus nodes 118 and the connection of active port HIU to the hub and the transfer request bus.

Claims 1 to 13 were rejected under 35 U.S.C. 102(e) as anticipated by Robertson et al U.S. Patent No. 6,496,740.

Claims 1 and 8 recite subject matter not anticipated by Robinson et al. Claim 1 recites "wherein at least one of said plurality of ports consists of an active data port connected to said request queue controller capable of specifying a data source, a data destination and a data quantity to be transferred." Claim 8 similarly recites "wherein at least one of said plurality of ports is an active data port capable of specifying a data source, a data destination and a data quantity to be transferred." Earlier recitations in these claims required the ports to be connected to the hub for data transfer. The OFFICE ACTION states at page 3, lines 12 to 15 that this subject matter is anticipated by Robinson et al at column 11, lines 9 to 26 and column 12, lines 43 to 45.

The Applicants respectfully submit that Robinson et al fails to teach a data port connected to the hub for data transfer and connected to the request queue controller for specifying data to be transferred. Robinson et al states at column 11, lines 9 to 28:

"FIG. 5 shows from a higher level, the interconnection of the four main functional blocks, the first two of which, the TCHP hub 520 and the ports 521 (including all ports interface

composed in FIG. 5 of 530, 531, 532, 533 and 560). The TCHP hub 520 and the ports 521 are an integral part of the TCHP. The other two units, the transfer request feed mechanism 545 and the data transfer bus DTB 555 are closely associated functional units, but not a part of the TCHP itself. FIG. 5 highlights the possible connection multiple data transfer bus DTB nodes and the possible connection of multiple transfer request nodes.

"Address Generation

"Address and word count are required outputs of each address unit and these outputs update the selected channel, given the size of the transfer to be performed. The complexity of address generation within the TCHP is increased by the need to accommodate the following transfer options which are of two major types:

- "1. Normal Linear transfers, and
- "2. two dimensional (2-D) transfers."

This disclosure of Robinson et al includes ports 521 including ports 530, 531, 532 and 560 illustrated in Figure 5. These are all connected to TCHP hub 520. Figure 5 also illustrates processor-cache (IMP nodes) 570, 571 and 572. These are all connected to data transfer bus 555 and transfer request feed mechanism 545. Figure 5 fails to illustrate any structure connected to both the TCHO hub 520 and the queue manager. This is more clearly illustrated in Figure 3 of Robinson et al. This shows ports 350 to 355 and with of these ports connected to request queue controller 300.

In contrast, claims 1 and 8 recite connection of the port to both the data transfer hub and to the request queue controller. This is illustrated in Figure 4 of this application. Active port HIU 411 is connected to TCHO hub 100 via TCHP ports (I/O subsystem) 110 and to request queue controller 101 via transfer request node 160 and the transfer request bus including nodes 117.

Column 12, lines 43 to 55 of Robinson et al teaches parts of the request queue manager in the form of a queue manager request bus master as illustrated in Figure 7. This structure corresponds to the request queue controller recited in claim 1 and the

receiving, prioritizing and dispatching data transfer requests step recited in claim 8. This portion of Robinson et al includes no teaching regarding ports and no teaching that a port is connected to both the data transfer hub and the request queue manager as required by claims 1 and 8. The reference to Figure 8 of Robinson et al at column 12, lines 49 to 55 likewise fails to provide any teaching of a data port. Accordingly, claims 1 and 8 are not anticipated by Robinson et al.

New claims 14 and 15 recite subject matter not anticipated by Robinson et al. New claims 14 and 15 recite the connection of active port 411 to special transfer request node 160 at the upstream most end of the chain of transfer request nodes 117. No teaching of Robinson et al anticipates this subject matter.

The Applicants respectfully submit that all the present claims are allowable for the reasons set forth above. Therefore early reconsideration and advance to issue are respectfully requested.

If the Examiner has any questions or other correspondence regarding this application, Applicants request that the Examiner contact Applicants' attorney at the below listed telephone number and address to facilitate prosecution.

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Respectfully submitted,



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